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THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent No7,012,010
Patent Issue Date March 14, 2006
Application Serial No. 10/688,439
Filing DateOctober 16, 2003
Assignee Micron Technology, Inc.
Inventorship.....Trung Tri Doan et al.
Attorney's Docket No.MI22-2416
Title: Methods of Forming Trench Isolation Regions

**REQUEST FOR CERTIFICATE OF CORRECTION OF PATENT FOR
APPLICANT MISTAKE and PTO MISTAKES (37 C.F.R. §§ 1.322(a) and 1.323)**

To: Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
ATTN: Decision and Certificate of Correction
Branch of the Patent Issue Division

From: Mark S. Matkin (Tel. 509-624-4276; Fax 509-838-3424)
Wells St. John P.S.
601 W. First Avenue, Suite 1300
Spokane, WA 99201-3828

**Certificate
DEC 4 2006
of Correction**

Sir:

It is hereby requested that a Certificate of Correction be issued with respect to Patent No. 7,012,010 B2, granted March 14, 2006, in accordance with the Certificate of Correction form attached hereto in duplicate.

It is noted that an error introduced by the patentee appears in this patent of a typographical nature. Such error occurred in good faith. Correction thereof does not involve such changes in the patent as would constitute new matter or would require re-examination. The exact page and line number where such error occurs in the application file is:

**Preliminary Amendment filed October 16, 2003, page 7, claim 68/
Issued Patent, col. 8, line 10, claim 5.**

Other errors listed on the Certificate of Correction form were apparently incurred through the fault of the PTO as will be disclosed by the records of files in the Office.

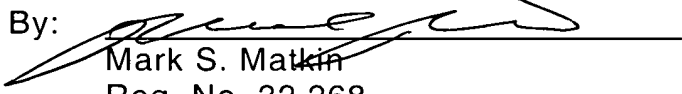
Applicant respectfully refers to the November 25, 2005 Notice of Allowance where claims 65-68 and 107-125 are indicated to be allowed. However, in the issued patent only claims 1-5 (previously claims 65-68) are indicated. Claims 107-125 (issued claims 6-24) have been completely omitted from the issued patent. Applicant respectfully requests claims 6-24 be inserted in the issued patent by way of a Certificate of Correction.

Attached hereto, in duplicate, is Form PTO-1050, with at least one copy being suitable for printing.

Enclosed is a check in the amount of \$100.00, as required by 37 CFR 1.20(a).

Respectfully submitted,

Dated: 11-27-06

By: 
Mark S. Matkin
Reg. No. 32,268

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : US 7,012,010 B2
ISSUED : March 14, 2006
APPLICATION NO.: 10/688,439
INVENTOR : Trung Tri Doan et al.

It is certified that an error or errors appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Col. 5, line 21 –

Replace "O₃ and 88% O₂, at 4000 sccm and helium at from 014 200"
With -- O₃ and 88% O₂, at 4000 sccm and helium at from 0-200--

Col. 8, line 18, claim 5 –

Replace "powers an aspect ratio of the trench from what is was prior"
With --lowers an aspect ratio of the trench from what it was prior --

Please insert the following claims:

--6. The method of claim 1 comprising solidifying material of the initially liquid deposition prior to the subsequent initially solid deposition.

7. The method of claim 1 wherein the initially liquid deposition and the initially solid deposition occur at different temperatures.

8. The method of claim 7 wherein the initially liquid deposition is conducted at temperature lower than that of the initially solid deposition.

9. The method of claim 1 comprising annealing the material of the initially liquid deposition prior to the subsequent initially solid deposition.

10. The method of claim 9 wherein the annealing is effective to solidify the material of the initially liquid deposition prior to the subsequent initially solid deposition.

Page
1 of 3

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Patent No. US 7,012,010 B2

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APPLICATION NO.: 10/688,439

INVENTOR : Trung Tri Doan et al.

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11. The method of claim **1** wherein the initially liquid deposition comprises introducing SiH_4 and H_2O_2 into a chamber within which the semiconductive substrate is received.

12. The method of claim **1** wherein the initially liquid deposition comprises introducing SiH_4 , H_2O_2 , and N_2 into a chamber within which the semiconductive substrate is received.

13. The method of claim **1** wherein the initially liquid deposition comprises introducing $(\text{CH}_3)_z\text{SiH}_{4-z}$ and H_2O_2 into a chamber within which the semiconductive substrate is received, where z is at least 1 and no greater than 4.

14. The method of claim **13** wherein the $(\text{CH}_3)_z\text{SiH}_{4-z}$ comprises CH_3SiH_3 .

15. The method of claim **1** wherein material of the initially liquid deposition deposits over a base of the isolation trench faster than over sidewalls of the isolation trench.

16. The method of claim **1** wherein material of the initially liquid deposition deposits over a base of the isolation trench thicker than over sidewalls of the isolation trench.

17. The method of claim **1** comprising exposing material of the initially liquid deposition to ultraviolet light prior to the subsequent initially solid deposition.

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2 of 3

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INVENTOR : Trung Tri Doan et al.

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18. The method of claim **17** comprising exposing material of the initially liquid deposition to a temperature greater than a temperature at which the initially liquid deposition initially occurred prior to said exposing to ultraviolet light.

19. The method of claim **1** comprising exposing material of the initially liquid to an electron beam prior to the subsequent initially solid deposition.

20. The method of claim **19** comprising exposing material of the initially liquid deposition to a temperature greater than a temperature at which the initially liquid deposition initially occurred prior to said exposing to the electron beam.

21. The method of claim **1** comprising exposing material of the initially liquid to a plasma prior to the subsequent initially solid deposition.

22. The method of claim **21** comprising exposing material of the initially liquid deposition to a temperature greater than a temperature at which the initially liquid deposition initially occurred prior to said exposing to plasma.

23. The method of claim **1** comprising exposing material of the initially liquid deposition to RF energy prior to the subsequent initially solid deposition.

24. The method of claim **23** comprising exposing material of the initially liquid deposition to a temperature greater than a temperature at which the initially liquid deposition initially occurred prior to said exposing to RF energy.--

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14. The method of claim 13 wherein the $(\text{CH}_3)_z\text{SiH}_{4-z}$ comprises CH_3SiH_3 .

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23. The method of claim **1** comprising exposing material of the initially liquid deposition to RF energy prior to the subsequent initially solid deposition.

24. The method of claim **23** comprising exposing material of the initially liquid deposition to a temperature greater than a temperature at which the initially liquid deposition initially occurred prior to said exposing to RF energy.--

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Patent No. US 7,012,010 B2

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NOV 30 2006

PTO/SB/17 (07-06)

Approved for use through 01/31/2007. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Effective 12/08/2004.

Fees pursuant to the Federal Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL
For FY 2006☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 100.00

Complete if Known

Application Number	10/688,439 (US Pat 7,012,010)
Filing Date	Oct. 16, 2006 (Issued 3/14/06)
First Named Inventor	Trung Tri Doan
Examiner Name	David S. Blum
Art Unit	2813
Attorney Docket No.	MI22-2416

METHOD OF PAYMENT (check all that apply)☒ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____☒ Deposit Account Deposit Account Number: 23-0925 Deposit Account Name: Wells St. John P.S.

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☐ Credit any overpayments**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	0.00
Design	200	100	100	50	130	65	0.00
Plant	200	100	300	150	160	80	0.00
Reissue	300	150	500	250	600	300	0
Provisional	200	100	0	0	0	0	0.00

2. EXCESS CLAIM FEES**Fee Description**

	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
_____ - 20 or HP = _____	x _____	=	0.00

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
_____ - 3 or HP = _____	x _____	=	0.00

HP = highest number of independent claims paid for, if greater than 3.

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
_____ - 100 = _____	/ 50 = _____	(round up to a whole number) x _____	=	0.00

4. OTHER FEE(S)


Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): Req. for Certificate of Correction-App error**Fees Paid (\$)**

0.00

100.00

SUBMITTED BY

Signature 	Registration No. 32,268 (Attorney/Agent)	Telephone (509) 624-4276
Name (Print Type) Mark S. Matkin	Date 11-27-06	

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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PTO/SB/17 (07-06)

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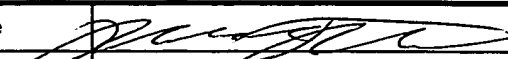
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<u>Total Sheets</u>	<u>Extra Sheets</u>	<u>Number of each additional 50 or fraction thereof</u>	<u>Fee (\$)</u>	<u>Fee Paid (\$)</u>
- 100 = _____	/ 50 = _____	(round up to a whole number) x _____	= _____	0.00

4. OTHER FEE(S)

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	0.00
Other (e.g., late filing surcharge): <u>Req. for Certificate of Correction-App error</u>	100.00

SUBMITTED BY

Signature 	Registration No. (Attorney/Agent) 32,268	Telephone (509) 624-4276
Name (Print Type) Mark S. Matkin	Date 11-27-06	

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PTO/SB/21 (09-06)

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**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

12

Application Number

10/688,439 (US Pat. No. 7,012,010 B2)

Filing Date

October 16, 2003 (Issued March 14, 2006)

First Named Inventor

Trung Tri Doan

Art Unit

2813

Examiner Name

David S. Blum

Attorney Docket Number

MI22-2416

ENCLOSURES

(Check all that apply)



Fee Transmittal Form



Fee Attached



Amendment/Reply



After Final



Affidavits/declaration(s)



Extension of Time Request



Express Abandonment Request



Information Disclosure Statement



Certified Copy of Priority Document(s)

Reply to Missing Parts/
Incomplete ApplicationReply to Missing Parts
under 37 CFR 1.52 or 1.53

Drawing(s)



Licensing-related Papers



Petition

Petition to Convert to a
Provisional Application

Power of Attorney, Revocation



Change of Correspondence Address



Terminal Disclaimer



Request for Refund



CD, Number of CD(s) _____

☐ Landscape Table on CD

After Allowance Communication to TC

Appeal Communication to Board
of Appeals and InterferencesAppeal Communication to TC
(Appeal Notice, Brief, Reply Brief)

Proprietary Information



Status Letter

Other Enclosure(s) (please identify
below):

PTO Return Receipt Postcard

Chk # 152036 for \$100.00

Request for Certificate of Correction-App
and PTO errors

Certificate of Correction in duplicate

Remarks

Customer No. 021567

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name

Wells St. John P.S.

Signature

Printed name

Mark S. Matkin

Date

11-27-06

Reg. No.

32,268

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature

Typed or printed name

Muriel G. Dunnigan

Date

November 27, 2006

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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